

ABSTRACT

There is disclosed an ink jet printhead which comprises a plurality of nozzles 3 and a bubble forming chamber 7 corresponding to each nozzle respectively. At least one heater element 10 disposed in each bubble forming chamber 7 to heat a bubble forming liquid 11 to a temperature above its boiling point to form a gas bubble 12 therein. The generation of the bubble 12 causes the ejection of a drop 16 of an ejectable liquid (such as ink) through an ejection aperture 5 in each nozzle 3, to effect printing. Integrated circuit metalization layers corresponding to each of the nozzles supply electrical energy to the heater 14. The heater 14 and the integrated circuit metalization layers 23 are substantially planar and at least partially overlapping, the metallization layers electrically connected to the heater electrodes 15 by vias, the cross sectional area of all the vias being greater than 50% of the surface area of one side of the heater 14. A relatively large number of vias lowers the electrical resistance between the electrodes and the CMOS metalization layers. Lower resistance reduces the power losses and improves the operating efficiency of the printhead.